

ABSTRACT OF THE DISCLOSURE

A permanent magnet synchronous motor includes a stator and a permanent magnet excited rotor, with the stator provided with a winding which has cyclically repeating winding factors $|\xi_p| = 0.945$, $|\xi_{5p}| = 0.140$, and $|\xi_{7p}| = 0.060$, and a skew angle $\gamma = \frac{2\pi}{18p}$, wherein p is the number of pole pairs.